

Increasing Reach and Speed in the Flat Walk and Fox Trot
© Lee Ziegler 1999

About extension, speed and increasing stride length:

In the Fox Trotter show world, speed, stride and a "big front end" are considered very desirable. While other gaited breed standards favor high knee action or a long overstride, Fox Trotters are expected to take long, low steps in front, while working with some reach in the hind legs, overreaching in the flat walk and overreaching or perhaps disfiguring their front tracks in the fox trot. They are also expected to move with some speed in their gaits, especially in the show ring. This faster speed can come in two ways, either from increasing the number of steps taken in a specific time (more rapid use of the legs) or by taking the same number of steps and increasing the ground covered with each step. Many horses increase speed by taking more quick steps, without reaching very far. You will often see very fast horses that take rather short, choppy steps—but a lot of them!

There are two ways a horse can increase the distance between the set down of the his hooves. He can take a longer step by reaching farther with each leg, or he can "hop" from one hoof to the other. To visualize this, think of the difference between a person jogging and one race-walking. The jogger hops in his steps, with both feet off the ground for a split second, while the race-walker reaches in his steps, with no moment when both feet are clear of the ground. Both methods increase the ground covered at moderate speed fairly efficiently. The difference lies in the concussion of each step. The hopping motion jars the joints and bones of the entire leg as it sets down with no other leg supporting weight, while the reaching motion carries less concussion because there is always another leg in support when the foot hits the ground. In a pleasure Fox Trotter, where both speed and smoothness of gait are a consideration, the best way to increase stride length while maintaining a true gait is to increase the stretch between the legs in each step.

There are plenty of mechanical methods for making a horse reach out, ranging from "low heel, long toe" shoeing or toe weighted shoes, to the practice of making a horse nose out in the belief that since a horse can't reach beyond his nose he must be strung out to have a long stride. These fail to take into account the two things that actually determine stride length in a horse, his bony conformation and the condition and elasticity of his muscles. There is nothing you can do about your horse's conformation except to be honest with yourself about how he is built. A horse with a straight shoulder and an upright, short humerus (upper arm, the bone from the point of the shoulder to the elbow) will not be able to reach out as far in front of him as one with a shoulder that is angled toward a 45 angle and with a long, more horizontal humerus. However, any horse can increase his muscle condition and elasticity through specific exercises. Even the straight-shouldered horse can improve his reach and length of step, without being rushed into a rough, hopping gait.

One way to increase the reach between front legs is to condition the muscles in the shoulders and chest to stretch. Some horses have naturally elastic shoulders, but most will benefit from exercises specifically designed to loosen the shoulders. The resulting strides will be long, fluid and even, with no likelihood of hopping or reaching farther on one side than the other. The same

exercises work to loosen a horse's shoulders whether he is taking long steps in a flat walk, a fox trot, or a hard trot. Although improved elasticity in the shoulder and leg muscles are important in lengthening a horse's stride, the use of his legs is also strongly effected by the way he uses his back. For any horse to take long steps, he must have well-conditioned back muscles that work to relay the thrust of his hindquarters through his body to his front legs. The best way for a horse to develop the muscling that makes it possible for him to lengthen or extend his steps is by progressive work in a "working" alternated with a semi-collected position. This will help strengthen his haunches and his back, so that he can stride out easily in his own rhythm without rushing or taking hurried, choppy steps. Strange as it may seem, good extension is a result of strength developed in semi-collection. Lengthened steps develop from shortened ones.

The type of extended gaits your horse can develop through exercises designed to loosen his shoulders and condition his back and haunches will be different from those of a horse forced into "false extension" and higher speed by rushing his gait or through mechanical means. Such a horse may take long steps in his hurried gaits, but he will be stiff, rough to ride, and lack rhythm. A horse that can extend and move smoothly in his own rhythmic gait will be a much better pleasure horse than one that takes rapid, choppy, hurried steps.

Loosening the shoulders and strengthening the haunches with the shoulder-in:

The shoulder-in is a very old exercise, first invented to loosen the shoulders of stiff horses, later identified as useful use in developing overall strength and suppleness by working the hindquarters and back as well. In it, the horse moves forward, at first along a wall or rail, with his haunches moving parallel to the wall and his shoulder about a foot and a half away from the track made by the haunches, his inside hind hoof track falling into the print of the outside front hoof. His neck and head are curved away from the wall so that he is facing to the side, not in the direction he is moving. The most important part of this exercise for loosening the shoulders is that as the horse moves forward, his front legs cross one another at every step. This stretches the muscles in his chest and shoulders, loosening them and making it possible for him to take longer steps when he returns to work on a straight track. The most important part of this exercise for strengthening the haunches is that the horse's weight is shifted to the rear and over the inside hind leg as he moves forward. And the most significant part of this exercise for developing a strong and supple back, is the flexion along the back, from poll to tail, which develops the elasticity of the muscles along the spine.

Shoulder-in: Ride your horse on light contact with a snaffle bit, if at all possible, (you cannot teach this exercise in a gag and will not have much success in a curb) at an ordinary walk, in a small circle, no larger than 30 feet across, at one corner of your ring or arena. As you come out of the circle, along the straight side of the arena, adjust your aids so that your horse moves forward with his haunches parallel to the rail, and his head, neck and shoulders yielded away from the rail more strongly than they were in the shoulder-fore. Adjust your seat very slightly so that your pelvis and shoulders are parallel to the angle of the horse's shoulders. Take up the inside rein (the one toward the center of the arena) enough to curve the horse's neck enough for you to see his inside eye. Press the outside rein (the one toward the rail) against the neck just in front of the withers to bring the shoulders over, away from the track of the hind legs. Push with your inside leg at the girth, into the horse's side angled toward the outside shoulder. Keep your

outside leg just back from the girth, ready to keep the horse from turning completely sideways to the rail. The horse will move forward with his body in a shallow C curve, looking toward the inside of the ring, but moving parallel to the rail. His inside hind hoof will step into the track of his outside front hoof. Go for a few steps in the shoulder-in, then return to the 30 foot circle, this time coming out of it straight along the rail. Cross the arena, and change directions. Practice again, going the other direction. Over time you can gradually increase the number of steps your horse moves in the shoulder-in, until he can go down one side of your arena in the exercise. Do not try to do this exercise around the corner of an arena at first. That is very difficult for the horse, and not really necessary for gait development. Do not spend more than a few minutes on this exercise in any one lesson— it is hard for the horse and overwork in it will make him resentful and stiff.

At first, you will move the horse's forehand over just a few inches from a straight position. Practice with this amount of bend for a few weeks, then ask for a bit more, until your horse is moving with his shoulders sideways to the track, at an angle of about 20 from the rail. Again, practice with this bend for several weeks to a month, then ask for a bit more, until the horse can easily travel with his shoulders yielded over and his body at about a 30 angle to the rail. At this point, he will no longer step his inside hind hoof into the track of his outside front, but will be moved beyond this, making four distinct hoof prints.

Possible problems: Your horse may at some point become stiff and refuse to move forward in the shoulder-in position. Don't force him to keep moving forward stiffly. Simply return him to a small circle and start again. He may also start to bend his neck too much, doing a "neck-in" and not moving his shoulders over at all. This happens because you are using your inside rein too strongly and not using the outside one with good contact against the neck and withers. Readjust your reins, lengthening the inside rein and taking up a bit on the outside one. Another fault may be that the horse moves his haunches over toward the rail, losing any curve in his body, and basically walks sideways, with no bend, or even worse, with an opposite bend of the one you are trying to achieve. This is often accompanied by a very stiff neck and mouth lugging on the bit. To correct this problem, return to the circle, then as you come out of it, use your outside leg, lightly, just behind the girth to keep the haunches straight. Remember to use the inside leg, at the girth, to give the horse a focal point for bending, and to keep him moving forward.

When your horse has learned the shoulder-in at the ordinary walk, try a few steps at a flat walk. Gradually increase the number of steps he works at that gait, until he can easily and smoothly transition into a shoulder-in from a circle in the flat walk, go down half the arena in the exercise at that gait, then return to a circle in it. Be sure to work in both directions to develop looseness in both shoulders. Do not try this exercise at the fox trot — it is not necessary to work at it in that gait, and it can be very difficult for even the most supple horse.

If you want to help your horse become truly strong and supple you can eventually work up to doing the shoulder-in through the curves of your arena, and later on 60 ft, circles. This takes time, consistent work (at least five sessions a week for several months) and a strong, well-conformed horse. This degree of work is not necessary for loosening the shoulders to increase the stride in a gait, but it works to strengthen the haunches and the back. You can also practice the shoulder-in down the center line of your arena, away from the rails. This is not easy, and

trying it will soon let you know how responsive your horse is to your leg and rein aids. These advanced exercises at the shoulder-in will be possible only if your horse is very supple and athletic, and can take several years to perfect. For pleasure riding, this much work in the exercises known as the lateral flexions is probably over-kill.

Shortening and lengthening stride:

Strange as it seems, to increase stride without causing a horse to string out and lose rhythm, you must first shorten the steps he takes, then ask him to move out with more energy and allow them to lengthen. By doing this, you build strength in his back and increase the elasticity of his muscles. This, in turn, gives him the ability to use his body more effectively to take longer, reaching steps. Don't worry, your horse won't get "stuck" in a shorter stride length if you ask him to take shorter steps. Instead, he will begin to balance a bit more toward the rear and start to push with his hindquarters.

Beyond semi-collection to shorter steps:

In the flat walk: Ride your horse in a working speed flat walk, on a straight line, with light contact on the reins, your hands at a normal height, over the pommel of the saddle. Very lightly begin to finger the reins, one at a time, timing your fingering so that you resist with the rein on the same side as each forward moving front leg — he reaches forward with the right front, you squeeze and release the right rein.

This will inhibit his forward motion, and bring his nose in slightly, so that his forehead approaches the vertical. He will start to slow down. As he slows, squeeze with your legs and push strongly with your back, by tipping your pelvis so that you press downward with your tailbone into the saddle, tightening the muscles in your lower back, to keep him moving forward. He will start to take shorter steps, since he must go forward but you are preventing him from reaching out in his usual flat walk. (You are compressing his body by using legs, back and reins all at once. This is the only time you should use the reins and legs simultaneously.) Ride him for a few short steps, then relax all tension in the reins but push strongly with your back, tipping your pelvis under so your buttocks are firmly pressed against the saddle. Push on with your legs, using a strong squeeze and release. He should return to his usual step length with increased energy. Repeat, asking him to take about three short steps at a time, returning to a slack rein and pushing him on with your legs for a loose walk after each series of shortened steps. Do not try to ride for a long distance in a short, inhibited walk. The benefit in this exercise is in shortening and then immediately allowing your horse's steps to lengthen, working the muscles in his body like a living accordion or slinky. This builds strength and flexibility so that he can take longer steps when you ask for them.

In the fox trot: When your horse is responding well to shortening his steps in the flat walk, push him on into the fox trot and repeat the same exercise, being sure to keep him from slowing into the flat walk. Be careful. If your horse has any pacing tendency this exercise may cause him to revert to the pace. Do not keep at it until he stiffens his back and starts to pace. Alternate it with work in the flat walk, in circles, shoulder and haunches in exercises, and free work on a loose rein to keep him flexible and relaxed. Do most of your riding on a light rein, with very little

contact, taking a firmer feel only when you ask for the shortened steps. Ask for only a few short steps at a time, alternating with longer steps on a loose rein.

You can practice asking for shorter steps in your arena at first, but as soon as you can, work on this exercise out on the trail. It is good practice for your horse, especially if you ask him to shorten his steps going down a slight hill, while allowing him to take longer ones going up. Work as many hills as you can, of gradually increasing steepness. This will help your horse develop his haunches in a more natural setting than working on exercises in the ring. Constant ring work is boring. It is a good idea to keep your horse and yourself fresh by working on exercises while you trail ride so they won't seem like chores.

Lengthening steps: After you have practiced shortening steps at the flat walk and fox trot for a while, you may notice that when you let your horse stretch back out from his shortened gait, he will take a couple of very long steps before returning to his usual stride length. The effect is almost as if you have compressed a spring somewhere in your horse's body, then released the compression so that it stretches out to its full length, pushing his legs into longer steps as it expands. This is the beginning of the process of increasing stride length. Now you can build on those few longer steps until your horse moves out steadily in gait with increased reach.

In the flat walk: Ride your horse forward in an ordinary, working flat walk. Work the shoulder-in a few steps in each direction, to loosen his shoulders and chest, then, riding in a straight line, parallel to the rail, ask him to shorten his steps for a few strides. You will feel his energy build under you as you maintain the short strides. Then, as you feel his back gather under your seat, simultaneously push him forward into a longer step by squeezing with your legs, pushing with your seat [again tucking your tailbone under you and shoving down with your lower back muscles, much as you would if "pumping" in a swing] and let out just a bit with your reins, keeping contact but making it much lighter than you used when shortening steps. You will feel your horse thrust strongly forward with his hind legs, and reach out with the front. Keep up the pushing motion with your back and legs and the light contact as you ride at this extended step at the flat walk for a few strides, then release your aids (stop pushing with your seat and legs) and return to an ordinary, working flat walk. Repeat again on the other side of your arena, asking for this lengthened gait for about half the length of your straight-of-way. Cross the arena, and repeat going the other direction.

Over the course of several weeks, increase the number of lengthened steps your horse takes until he is able to reach well along the entire length of one side of your arena. Practice lengthening across the diagonal of your arena, and on the long sides, but not through the corners or around curves. [Lengthening on the curves will be very difficult for your horse and may cause him to break gait or hop until he is conditioned to bend and take long steps at the same time. This will take several months of work.] You can also practice lengthening stride outside the arena, if you have a straight and fairly flat stretch of trail to ride on. Later, after your horse has learned to take longer steps, you can sometimes increase reach in the gait a little more by riding down a very slight incline as you ask for longer stride. But, be careful with this, since it can sometimes cause the horse to break gait.

In the fox trot: As your horse learns to respond to the cues to lengthen stride in the flat walk, you can begin asking him to extend his fox trot. Practice a few steps of shoulder-in at the flat walk in both directions as a warm up. Again on a straight-of-way, gather your horse into a shorter fox trot, and then push him out of it the same way you extended the flat walk, using your back and legs strongly, while retaining lighter contact with the bit. Be sure not to let him raise his head and start to rack, or stretch out his nose and go into a hard trot. Practice a few steps at a time, gradually increasing the distance you travel in this gait. Shorten your horse's steps on the short sides of your arena and push him out to more reaching gait on the long sides, until your horse moves out well in the faster, longer striding gait. Eventually, you will be able to ride your horse in the extended gait most of the way around your arena, shortening his steps only at the curves.

With time and practice shortening and lengthening strides in the flat walk and fox trot, your horse will develop a flexible and strong back, and will be able to take increasingly longer steps when pushed on for speed. Remember that his rhythm should remain the same, no matter what his speed, and his gait should flow from his back, not chop from his shoulders. If at any time he loses rhythm or starts to take hopping steps, back off, slow down, and reestablish a good, consistent gait at a slower speed. Then gradually work up to a faster gait, doing plenty of work on circles, serpentines and other slow flexibility-building exercises at the ordinary and flat walk.

"Thread"

There are limits to every horse's ability to work in his gaits. Some can go very fast and still stay rhythmic and consistent, and others will start to hop and break gait almost immediately as you try to speed up their gaits. Peruvian Paso trainers say that a horse that can work both slowly and with great extension in a good, consistent gait has a "wide thread." With work, most horses can develop a wider "thread" than they have when first ridden, but few will be able to reach top extension without breaking gait. This is true of all horses in all gaits, not just Peruvian Pasos. When you are increasing stride and speed in your horse, you will reach a point after which the rhythm changes. This is the limit of your horse's "thread." If you want to push him beyond it for more speed and stride, be aware that you will no longer be doing the gait you set out to improve. When this happens in the flat walk, your horse will most likely be doing a running walk. If it happens in the fox trot you may have slipped into a rack, a hard trot, a "fox rack" or diagonal rack. Be careful when extending gait to stay within the limits of your horse's thread — he will give you a better, more comfortable ride if you do.